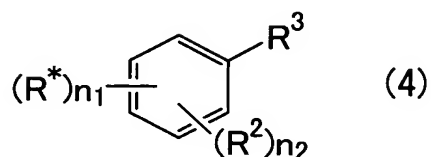


## ABSTRACT

A process for preparing an optically active biaryl compound the formula (4):

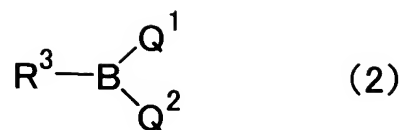


5 wherein R<sup>\*</sup>, R<sup>2</sup>, R<sup>3</sup>, n<sub>1</sub>, n<sub>2</sub> and \* are as defined hereinafter, which comprises reacting an aromatic sulfonic acid ester compound of the formula (1):



wherein

10 R<sup>1</sup> is a substituted or unsubstituted alkyl or aryl group,  
 R<sup>2</sup> is the same or different and represents a fluorine atom,  
 a cyano group, a nitro group, a substituted or  
 unsubstituted linear or branched alkyl group, etc.,  
 R<sup>\*</sup> is the same or different and represents a substituent  
 15 having at least one asymmetric carbon, or  
 the substituents on the adjacent carbon atoms of the  
 benzene ring may be bound each other and taken together  
 with the benzene ring to form a fused polycyclic aromatic  
 ring, and provided that R<sup>1</sup> is not a trifluoromethyl group,  
 20 a nonafluorobutyl group or a pentafluorophenyl group,  
 with an organic boron compound of the formula (2):



wherein

$\text{R}^3$  is a substituted or unsubstituted aryl or heteroaryl group, and

- 5  $\text{Q}^1$  and  $\text{Q}^2$  are the same or different and each is a hydroxyl group, an alkoxy group having 1 to 4 carbon atoms, etc., at 70°C or below in the presence of a nickel catalyst and a base.